

# FAIRBANKS® S C A L E S



## FB2900 SERIES

INTRINSICALLY SAFE INSTRUMENT

Fairbanks Scales' next-generation intrinsically safe weighing instrument rated for all Classes, Divisions, and Groups. Powered by a lithium iron phosphate battery, the FB2900 delivers industry-leading cold weather performance using a cable free quick-connect battery latching system for effortless changeovers. Optional features for safe area scale control, transaction records, external communications, and setpoint operations including checkweighing, batching, and freerunning.

[fairbanks.com](http://fairbanks.com)

# FB2900 SERIES

## INTRINSICALLY SAFE INSTRUMENT

### INSTRUMENT



The FB2900 series is our latest battery-powered intrinsically safe instrument that combines the advantages of time-tested analog load cell communication with a state-of-the-art intrinsically safe design to achieve ultimate weighing performance in a variety of hazardous environments.

Fairbanks Scales continues to be an expert in the design, manufacture, installation and support of intrinsically safe weighing solutions since our first Factory Mutual (FM) approved scale instruments in 1984.

- **INTRINSICALLY SAFE RATED BY FACTORY MUTUAL GLOBAL FOR ALL CLASSES, GROUPS AND DIVISIONS**
- **LITHIUM IRON PHOSPHATE BATTERY POWERED**
- **304 SERIES STAINLESS STEEL NEMA 4X ENCLOSURE**

DOT MATRIX LIQUID CRYSTAL DISPLAY (LCD) FOR COMMUNICATING WEIGHT DATA AND REDUCING EYE FATIGUE.

TACTILE KEYS GENERATE A SUBTLE USER "BUMP" YOU CAN FEEL IN THE MIDDLE OF THE KEYSTROKE. THIS TACTILE FEEDBACK HELPS USERS KNOW WHEN A KEY HAS BEEN ACTIVATED.



THE FB2900 ENCLOSURE IS CONSTRUCTED FROM 304 SERIES STAINLESS STEEL – THE SAME STAINLESS GRADE FOUND IN MOST FOOD, BEVERAGE, PHARMACEUTICAL AND CHEMICAL FACILITIES.

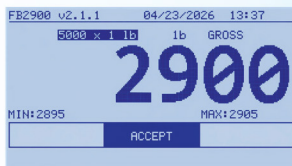


CONTROL KEYS ARE CENTRALLY LOCATED AND ARE REPRESENTED WITH A BRIGHT YELLOW COLOR.

A DUAL DESK/WALL MOUNT STAND COMES STANDARD WITH THE FB2900.

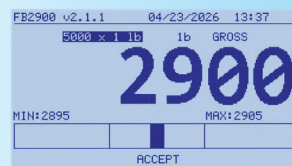


BATTERY PACK HOUSING MADE FROM 2" x 2" THICK EXTRUDED STAINLESS STEEL SQUARE TUBE.



3 STATE POSITION

OR



MOVING SLIDER BAR

### VISUAL CHECKWEIGHING:

- Two graphical display options:
1. **UNDER, ACCEPT** or **OVER** visual status indication.
  2. Slider bar for dynamic ranging with **UNDER, ACCEPT**, or **OVER** indicators.

## BATTERY PACK

Up to 60 hours of continuous operation with the industry-first low-voltage lithium iron phosphate (LiFePO4) battery technology. The low voltage battery pack is proven and rated as intrinsically safe even in the event of a direct short-circuit across the battery.

- **UP TO 60 HOURS OF CONTINUOUS USE**
- **RECHARGE UNDER 4 HOURS**
- **RATED FOR OVER 2,000 CHARGING CYCLES**



## COMMUNICATIONS & SETPOINTS

Connect over fiber optic to an optional FB7291 or FB7292 in the safe area for expanded functionality:

### Printing

Format and print weight tickets.



FB7291

### Outputs

4-20mA, 0-10V, RS232, RS485, TCP/IP, Ethernet/IP, Modbus TCP, and DeviceNET.

### Setpoints

Operate checkweighing or batch routines for up to (8) ingredients from the hazardous area.



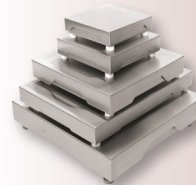
FB7292

### Remote Operation

Weigh from the safe area.

*Additional accessories may be required.*

## ALLIED COMPONENTS



### QuickSilver® Bench Scales

Quicksilver 304 series stainless steel scales follow sanitary design specifications and are perfect for applications food, beverage, pharmaceutical, and chemical facilities. Capacities range from 2 – 1,000 lbs.



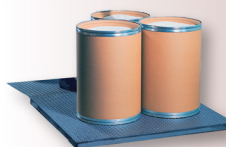
### Instrument Pillars

Pillars come in 10", 18" and 30" heights and feature a stainless steel cover that easily lifts off in order to run instrument cables down to the platform connections. This feature allows cabling to be both hidden and protected.



### Aegis® Drum Scale

Aegis Drum Scales up to 2,500 lbs. are perfect for weighing drums, totes, and other bulk products. Raised side rails and optional ramps help operators move products on and off the scale with ease. Portable solutions are also available.



### Aegis® Floor Scale

The Aegis floor scale built with 304 series stainless steel offers accurate and dependable weighing in caustic environments. The scales are configured with FM approved load cells for intrinsically safe environments.



FM Approved intrinsically safe equipment is constructed such that the electrical energy within the apparatus and of interconnecting wiring exposed to the explosive gas atmosphere is restricted to a level below that which can cause ignition by either sparking or heating effects.

# FB2900 SERIES

INTRINSICALLY SAFE INSTRUMENT

WEIGHING SOLUTIONS FOR THE WORLD

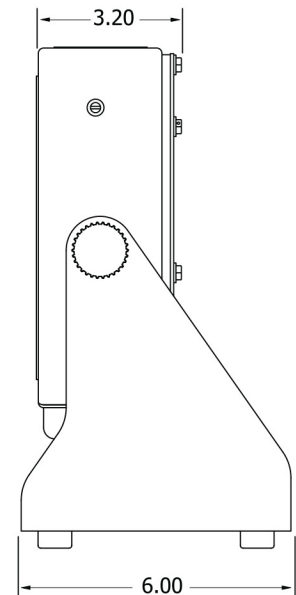
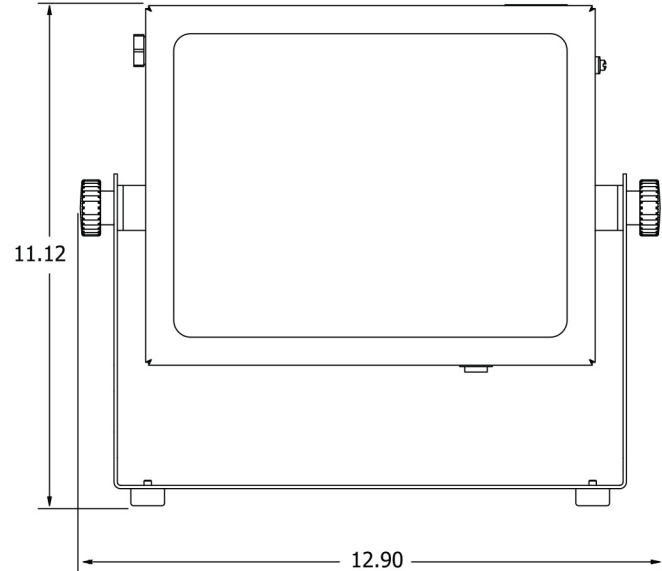
## SPECIFICATIONS

|  |  |
|--|--|
| Intrinsic Safety Ratings<br>(FB2900 & Battery) | Class I, II, III, Division 1, Groups ABCDEFG, T4<br>Class I Zone 0 AEx/EX ia IIC, T4 Ga<br>Zone 20, AEx/EX ia IIIC T64°C Da  |
| Enclosure                                      | 304 Stainless Steel  |
| Enclosure Rating                               | IP65   |
| Display  | 4.5" FSTN Graphical LCD with Backlight, 240 x 128  |
| Displayed Characters                           | 0.875 IN   |
| No. of Scales                                  | 1  |
| Load Cell Interface                            | Analog   |
| Max Load Cells                                 | Up to (8) 350 Ohm or (16) 1,000 Ohm  |
| Load Cell Excitation                           | 5V   |
| Units  | oz, lb, ton, g, kg, tonne  |
| Battery Life                                   | Up to 60 hours continuous (1 x 350 ohm load cell)<br>Up to 40 hours continuous (4 x 350 ohm load cells)  |
| Battery Capacity                               | 3.3 Ah, >2,000 cycles  |
| Battery Chemistry                              | Lithium Iron Phosphate (LiFePO4)   |
| Optical Ports                                  | Fiber Optic (to FB7290)  |
| Outputs  | RS232/485..... Optional (FB7290)<br>Ethernet TCP/IP..... Optional (FB7290)<br>Analog..... Optional (FB7290)  |
| PLC Interface                                  | EtherNet/IP..... Optional (FB7290)<br>Modbus TCP..... Optional (FB7290)<br>DeviceNet..... Optional (FB7290)  |
| Operating Temperature                          | 14°F to 104°F, (-10°C to 40°C)   |
| Operating Humidity                             | 0 to 95%   |
| Weight   | 6.75 lbs.  |
| NTEP Class                                     | Class III/IIIL: 10,000d  |
| Approvals                                      | NTEP CC: 21-106<br>MC: AM-5187C  |
| Options  | FB7290 Safe Area Remote Communications Terminal: <ul style="list-style-type: none"><li>▪ Safe Area Remote Scale Control</li><li>▪ Printed Tickets</li><li>▪ Transaction Records</li><li>▪ External Communications (Serial, Ethernet, PLC*)</li><li>▪ Setpoints (Batch, Checkweigh, Freerun)*</li></ul> |

\*additional accessories may be required



## DIMENSIONS



Your Fairbanks Scales Authorized Representative is:

Call toll-free for the representative nearest you:

**(800) 451-4107**

Call between 8:00 a.m. – 5:00 p.m. Central Time

Corporate Headquarters: 6800 W. 64th Street, Overland Park, Kansas 66202  
(816) 471-0231 fairbanks.com

